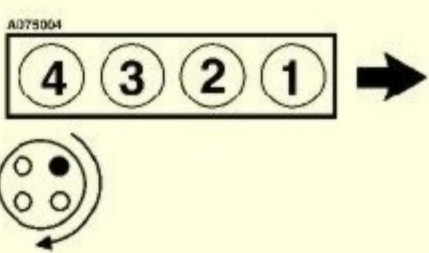
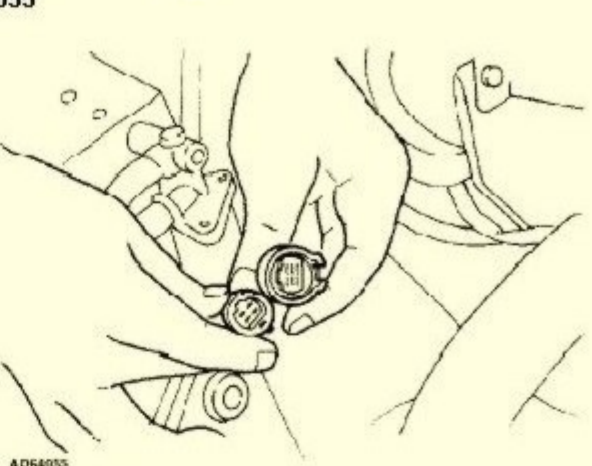
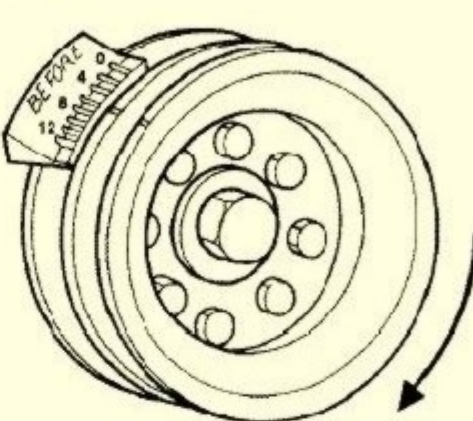
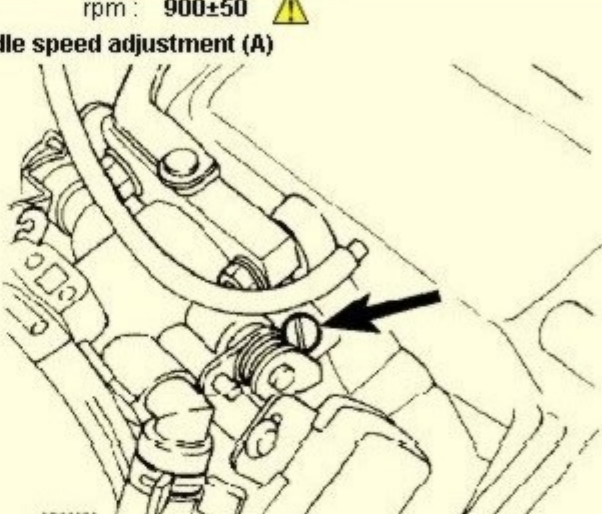
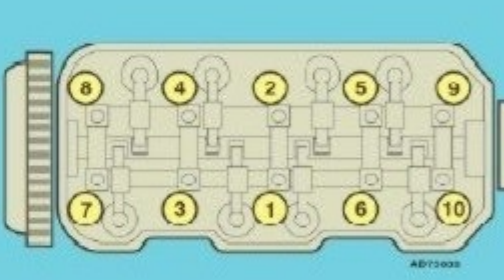


Complete data list		
Vehicle identification		
No. of cylinders	Type :	4/OHC
Capacity (Fiscal)	cc :	2559 (2536)
Compression ratio	:1 :	8,3
Suitable for unleaded petrol		Yes
Minimum octane rating	RON :	95
Ignition system	Type :	TSZ-i
Ignition system	Description :	Map-i
Trigger location		Distributor
Fuel system	Make :	Isuzu
Fuel System	Type :	I-TEC
Fuel System	Description :	MFI-i
Air metering	Type :	Mass
Combined ignition and fuel ECM		Yes
Diagnostic socket		Yes
Ignition system		
Ignition coil supply voltage	+ with ballast V :	11,0
Primary resistance	Ohm :	0,9
Firing order		1-3-4-2 ⚠
Cylinder layout		
		
Contact breaker gap/trigger air gap	mm :	0,2-0,4
Tuning and emissions		
Tuning conditions		⚠
Important note		
Idle speed		
Disconnect pressure regulator VSV connector Fig. 64055.		
		
Ignition timing	o = without + = with vacuum :	+
Ignition timing - basic BTDC	*Engine/rpm :	12/900 ⚠
Timing mark		
		
Ignition advance checks	AD62148	
Idle speed	*Engine/rpm :	ECM Controlled
	rpm :	900±50 ⚠
Idle speed adjustment (A)		
		
Oil temperature for CO test	*C :	60 R-Cat=80
CO level at idle speed - tailpipe	Vol. % CO :	2,5±0,5 Not adjustable
CO level at idle speed - tailpipe (Cat)	Vol. % CO :	0,5 Max
HC level at idle speed	ppm :	300
HC level at idle - alternative	ppm :	Cat=100
CO2 level at idle speed	Vol. % CO2 :	13-16
O2 level at idle speed	Vol. % O2 :	0,5-2,0
Spark plugs		
Spark plugs	Original equipment :	NGK
Spark plug	Type :	BPR6E-VG
Electrode gap	mm :	0,7
Spark plugs	Make :	Autolite
Spark plug	Type :	APP63
Electrode gap	mm :	1,0
Spark plugs	Make :	Bosch
Spark plug	Type :	WR7DCX
Electrode gap	mm :	1,1
Spark plugs	Make :	Champion
Spark plug	Type :	RN8YC
Electrode gap	mm :	0,6
Spark plugs	Make :	NGK
Spark plug	Type :	BPR6E-VG
Electrode gap	mm :	0,7
Fuel system		
System pressure without vacuum	bar :	3,0
Regulated pressure with vacuum	bar :	2,5
Engine coolant temperature (ECT) sensor	Ohm/*C :	200-400/80
Injector	Ohm :	2-3
Service checks and adjustments		
Valve clearance -INLET	mm :	0,20 hot
Valve clearance -EXHAUST	mm :	0,20 hot
Compression pressure	bar :	11,7
Oil pressure	bar/rpm :	4,0-5,0/4000
Radiator cap	bar :	1,0
Thermostat opens	*C :	76,5
Drive belt tension - alternator/PAS/AC	mm :	15
Lubricants and capacities		
Engine oil grade - cold climate	SAE :	10W/30
Engine oil grade - moderate climate	SAE :	10W/40
Engine oil grade - hot climate	SAE :	20W/50
Engine oil classification	API/ACEA :	SG/A2-96
Engine oil grade - alternative - moderate climate	SAE :	15W/40
Engine oil classification - alternative - moderate climate	API/ACEA :	SG/A2-96
Engine with filter	litres :	5,0
Gearbox oil grade	SAE :	10W/30
Gearbox 4/5 speed	litres :	2,95
Automatic transmission fluid	Type :	Dexron II
Automatic transmission (drain & refill)	litres :	4,5
Differential front/AT	litres :	1,5
Differential oil grade - rear	SAE :	80W/90
Differential rear	litres :	1,8
Cooling system	litres :	9,8
Brake fluid	Type :	DOT 3/4
Power steering fluid	Type :	Dexron III
Tightening torques		
Cylinder head instructions		⚠
Tightening sequence		
		
Cylinder head		
	Renew bolts :	No
Stage 1	Tighten :	40 Nm
Stage 2	Tighten :	80 Nm
Stage 3	Tighten :	88-108 Nm
Other tightening torques		
Main bearings	Renew bolts/nuts :	No
Main bearings	Stage 1 :	41 Nm
Main bearings	Stage 2 :	83-113 Nm
Big end bearings	Renew bolts/nuts :	No
Big end bearings	Stage 1 :	28 Nm
Big end bearings	Stage 2 :	57-61 Nm
Oil pump to cylinder block		19 Nm
Sump bolts		18 Nm
Flywheel/driveplate		54-64 Nm
Clutch to flywheel		16-20 Nm
Crankshaft pulley/damper		120 Nm
Camshaft sprocket/gear		60 Nm
Camshaft carrier/cap		⚠
Important note		
Camshaft carrier bolts		
Nuts = 22 Nm.		
Bolts = 8 Nm.		
Camshaft/rocker cover		
Inlet manifold to cylinder head		
Exhaust manifold to cylinder head		
Spark plugs		
Brake caliper to carrier	Front :	32 Nm
Brake caliper carrier to hub	Front :	155 Nm
Brake caliper to carrier	Rear :	20 Nm
Brake caliper carrier to hub	Rear :	105 Nm
Road wheels		⚠
Important note		
Road wheels		
Steel wheels = 78-118 Nm		
Alloy wheels = 118-127 Nm.		
Starting and charging		
Battery	V/RC(Ah) :	12/110 (65)
Starter motor	Type :	1,0 kW
Maximum cranking amps	A :	176-215
Alternator output at engine speed	A/Vrpm :	55/12/2500
Voltage regulator	Type :	I.C.
Regulated voltage	V :	14,2-14,8
Brake disc and drum dimensions		
Minimum disc thickness - ventilated	Front :	20,6 mm
Minimum disc thickness	Rear :	10,6 mm
Disc thickness variation	Front :	0,015 mm
Disc thickness variation	Rear :	0,015 mm
Disc runout	Front :	0,13 mm
Disc runout	Rear :	0,13 mm
Maximum drum diameter	Rear :	255,5 mm
Minimum pad thickness	Front :	1 mm
Minimum pad thickness	Rear :	1 mm
Minimum shoe thickness	Rear :	1 mm
Handbrake travel	No. of notches :	12-14
Air conditioning		
Air conditioning refrigerant	Type :	R12
Air conditioning refrigerant quantity	grams :	850-950
Air conditioning oil	Type :	Freol DS-83P
Air conditioning oil quantity	cm³ :	150